UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,486	09/30/2003	Mustafa K. Guven	08350.2689	1530

22852 7590 10/05/2005

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER	
BROADHEAD, BRIAN J	
ART UNIT	**PAPER NUMBER**
3661	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,486	GUVEN ET AL.	
	Examiner	Art Unit	
	Brian J. Broadhead	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 16-18* is/are rejected.

7)☒ Claim(s) *14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1 through 13 and 16 through 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuras et al., 6385970, in view of Lukich, 5468126.

1. Kuras discloses a diesel source(12) operable to generate a power output, the power source having a desired operating range on lines 28-35, on column 1; a transmission including a drive member operably connected with the power source and a driven member(10); a variable displacement pump in communication with the control system(48); a variable displacement motor fluidly connected to the variable displacement pump(52), the variable displacement motor being in communication with the control system, an observer in communication with the power source and operable to determine a current output torque estimate of the power source on lines 1-15, on column 2; a generator in communication with the control system, a motor in communication with the control system and with the generator; a sensor to detect transmission output speed, and sensing motor displacement inherently on lines 1-3, on column 3.

3. Kuras does not disclose a control system in communication with the power source and the transmission, wherein the control system is operable to receive at least one input indicative of a load on the transmission, to identify a desired load of the transmission based on the at least one input, to receive at least one input indicative of a

current power output of the power source, and to limit desired transmission load applied lo the driven member of the transmission based on the current power output of the power source to thereby prevent the power source from operating outside of the desired operating range; a sensor operably disposed between the variable displacement pump and the variable displacement motor, the sensor operable to detect a fluid pressure and to provide an indication of the fluid pressure to the control system; and a controller in communication with the transmission and operable to determine the desired load of the transmission and to limit the desired load placed on the driven member of the transmission to prevent the power source from operating outside of the desired operating range; and the signal indicative of current power includes a fuel injection timing signal.

4. Lukich teaches a control system in communication with the power source and the transmission, wherein the control system is operable to receive at least one input indicative of a load on the transmission, to identify a desired load of the transmission based on the at least one input, to receive at least one input indicative of a current power output of the power source, and to limit desired transmission load applied lo the driven member of the transmission based on the current power output of the power source to thereby prevent the power source from operating outside of the desired operating range on lines 35-40, on column 4; a sensor operably disposed between the variable displacement pump and the variable displacement motor, the sensor operable to detect a fluid pressure and to provide an indication of the fluid pressure to the control system(36); and a controller in communication with the transmission and operable to

determine the desired load of the transmission and to limit the desired load placed on the driven member of the transmission to prevent the power source from operating outside of the desired operating range on lines 35-55, on column 4; and the signal indicative of current power includes a fuel injection timing signal on lines 55-57, on column 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the control system of Lukich in the invention of Kuras because such modification would be controlled more effectively with several key parameters used by the control algorithm as stated on lines 62-65, on column 1.

Allowable Subject Matter

2. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose determining a limiting motor command signal by comparing the current power source output power estimate with the current transmission output speed and a maximum acceptable speed droop or overspeed scaling factor.

Response to Arguments

4. Applicant's arguments with respect to claims 1-13, 16-18 have been considered but are moot in view of the new ground(s) of rejection. Lukich discloses using applied load to control the transmission.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 571-272-6957. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJD
BJB

THOMAS C. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600